# Authors' response to reviewer

We are thankful to receive further comments on the manuscript "The Linear Link: Deriving Age-Specific Death Rates from Life Expectancy" submitted for publication in the MDPI journal Risks. Please find our response below.

**Open Review**

( ) I would not like to sign my review report
(x) I would like to sign my review report

English language and style

( ) Extensive editing of English language and style required
( ) Moderate English changes required
( ) English language and style are fine/minor spell check required
(x) I don't feel qualified to judge about the English language and style

| | Yes | Can be improved | Must be improved | Not applicable |
|---|---|---|---|---|
| Does the introduction provide sufficient background and include all relevant references? | (x) | ( ) | ( ) | ( ) |
| Is the research design appropriate? | (x) | ( ) | ( ) | ( ) |
| Are the methods adequately described? | (x) | ( ) | ( ) | ( ) |
| Are the results clearly presented? | (x) | ( ) | ( ) | ( ) |
| Are the conclusions supported by the results? | ( ) | ( ) | (x) | ( ) |

Comments and Suggestions for Authors

The manuscript was improved, and the Authors describe situations or countries where life expectancy at birth is known but not death rates (in the cover letter), but they did not use those countries in the paper. In my opinion, authors should add this description to the paper.

**Authors` response:** We find reasonable the suggestion to include our previous response in the discussion section of the manuscript. The new changes are highlighted within the manuscript.

On the other hand, the study mortality is not in poor-data countries examples- although they recognized limitations, which could be enough.

**Authors` response:** In the discussion section of the article we outline the characteristics of the method and the instances in which can be used and presented in the manuscript. It reads as follows:

*We have introduced a simple method, the Linear-link model, to derive the entire schedule of age-specific death rates, based on a single value of life expectancy and prior knowledge of human mortality patterns. […] The method can be useful in three different situations: future target life expectancy, life tables for countries with deficient data and historical life table construction. The former is the one explored in the present manuscript, while the latter two are only briefly discussed since their development goes beyond the scope of the paper of presenting the LL model.*

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